Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A recombinant human C1 inhibitor comprising a modified O-linked carbohydrate and having an extended plasma circulatory half-life compared to an unmodified C1 inhibitor, wherein the modified O-linked carbohydrate comprises a sialylated terminal galactose residue which is characterised in that its plasma circulatory half-life has been changed by modification of an O-linked carbohydrate, wherein the modification has been carried out by *in vitro* incubation with an enzyme preparation comprising one or more O-linked carbohydrate modifying enzymes or *in vivo* by co-expression of the recombinant human C1 inhibitor with one or more recombinant O-linked carbohydrate modifying enzymes in a cultured transgenic cell.

2-3. (Canceled)

- 4. (Currently Amended) The recombinant human C1 inhibitor according to claim 1, whereinwhich is characterised in that the plasma circulatory half-life of the modified inhibitor has decreased as compared to, or increased to at least 1.5, 2, 3 or 4 times the value of [[,]] the half-life of the unmodified inhibitor.
 - 5. (Canceled)
- 6. (Currently Amended) The recombinant human C1 inhibitor according to claim 1[[5]], wherein the which is characterised in that the non-sialylated O-linked carbohydrate is galactose or $Gal(\beta 1-3)GalNAc$.
- 7. (Currently Amended) The <u>methodrecombinant human C1 inhibitor</u> according to claim <u>25[[1]]</u>, <u>wherein the which is characterised in that the O-linked carbohydrate</u>

Appl. No. 10/531,855 Amdt. dated October 13, 2009 Response to Office Action of April 13, 2009

is modified by incubation with an enzyme preparation which comprises sialyltransferase ST3Gal IIIone or more O-linked carbohydrate modifying enzymes.

- 8. (Currently Amended) The <u>methodrecombinant human C1 inhibitor</u> according to claim <u>25</u>[[7]], <u>whereinwhich is characterised in that</u> the enzyme preparation comprises <u>sialyltransferase ST3Gal Ione or more sialyltransferases</u>, galactosidases or endoacetyl-galactosaminidases.
- 9. (Currently Amended) The <u>methodrecombinant human C1 inhibitor</u> according to claim <u>25[[8]]</u>, <u>wherein</u>which is characterised in that the enzyme preparation comprises sialyltransferases ST3Gal III and ST3Gal I, or endo α N acetyl galactosaminidase.

10-12. (Canceled)

13. (Previously Presented) A pharmaceutical composition comprising a human recombinant C1 inhibitor according to claim 1.

14-15. (Canceled)

- life of a glycoprotein or of a glycoprotein comprising compound, wherein the method comprises removing one or more non-sialylated O-linked carbohydrates comprising a terminal galactose residue from the glycoprotein by *in vitro* incubation with an enzyme preparation comprising one or more enzymes capable of removing the one or more non-sialylated O-linked carbohydrates, wherein the blood circulatory half-life of the glycoprotein or glycoprotein comprising compound is extended compared to an unmodified glycoprotein or glycoprotein comprising compound *in vivo* by co-expression of a recombinant glycoprotein with one or more recombinant enzymes capable of removing the one or more non-sialylated O-linked carbohydrates of the recombinant glycoprotein in a cultured transgenic cell.
- 17. (Previously Presented) The method according to claim 16, wherein the non-sialylated carbohydrate is galactose or Gal(β1-3)GalNAc.

- 18. (Canceled)
- 19. (Currently Amended) The method according to claim <u>16</u>[[18]], wherein the enzyme preparation comprises galactosidase or endo-acetylgalactosaminidase.
- 20. (Currently Amended) The method according to claim <u>16</u>[[18]], wherein the enzyme preparation comprises one or more recombinantly produced enzymes.
 - 21. (Canceled)
- 22. (Previously Presented) The method according to claim 16, wherein the glycoprotein is a C1 inhibitor.
- 23. (New) The method of claim 22, wherein the C1 inhibitor is recombinant human C1 inhibitor.
- 24. (New) The method of claim 23, wherein the enzyme preparation comprises Endo-α-N-Acetylgalactosaminidase.
- 25. (New) A method for extending the plasma circulatory half-life of a recombinant human C1 inhibitor, the method comprising modifying an O-linked carbohydrate of the C1 inhibitor by *in vitro* incubation of the C1 inhibitor with an enzyme preparation comprising at least one sialyltransferase capable of sialylating a terminal galactose residue, wherein the plasma circulatory half-life of the C1 inhibitor is extended compared to an unmodified inhibitor.
- 26. (New) The method of claim 25, wherein the plasma circulatory half-life of the modified C1 inhibitor has increased to at least 1.5, 2, 3 or 4 times the value of the half-life of the unmodified inhibitor.
- 27. (New) The method of claim 25, wherein the O-linked carbohydrate is galactose or $Gal(\beta 1-3)GalNAc$.